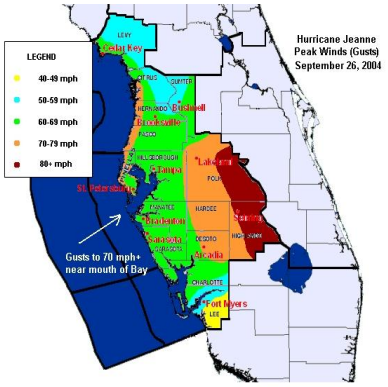
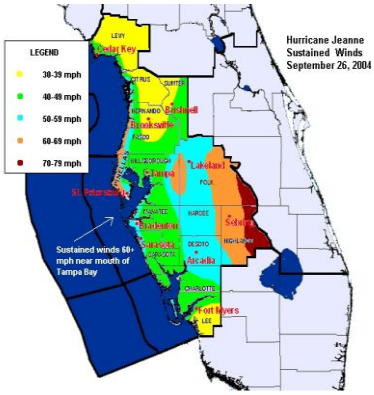
Hurricane Jeanne Preliminary Storm Survey

Disclaimer: Hurricane Jeanne track and intensity information from our surveys are preliminary. Final official intensity and track will be determined by the National Hurricane Center.

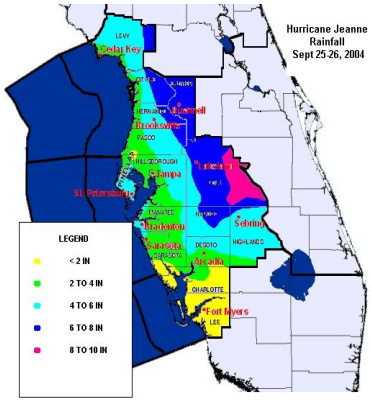
Deja Vu All Over Again!



Peak winds (gusts) from Jeanne across west central and southwest Florida, from surface data. Data sources include weather recording instruments from NWS, research, and amateur radio, as well as survey estimates.



Sustained winds from Jeanne across west central and southwest Florida, from surface data.



Total rainfall for the period beginning 7 AM September 25th and ending at midnight September 26th. Data courtesy of NWS and the Southwest Florida Water Management District.

Jeanne Follows in Frances' Footsteps

In a cruel twist of fate, Hurricane Jeanne virtually mirrored the track of Hurricane Frances, exactly three weeks later. There was one primary difference: Jeanne moved at a steady 12 mph through the central Florida peninsula, limiting the duration of inclement weather to 24 hours. This pace reduced the storm total rainfall, while allowing stronger sustained winds and peak gusts.

Winds

The stronger winds produced more widespread minor to moderate damage to poorly constructed structures and mobile/manufactured homes than with Frances, especially across Polk and Highlands Counties. Elsewhere, damage was about the same, consisting

of mainly blown down tree limbs and power lines, hundreds of uprooted shallow-rooted trees, and peripheral damage to residences and businesses, including lost roof shingles, stripped siding, fascia, and soffits, and scattered damage to carports and roofs within mobile home parks. In some areas, there was a cumulative effect of damage from both Frances and Jeanne.

Power outages were widespread across the peninsula once again; as with Frances, at least 2 million customers lost power sometime during Jeanne's passage. Total insured storm damage will once again be in the billions of dollars.

In west central and southwest Florida, gusts were highest in Polk and Highlands Counties, but also along the immediate Gulf coast from Pinellas to Citrus County. An amateur radio operator in Sebring recorded a 94 mph wind gusts; other gusts in excess of hurricane force (74 mph) were recorded in Polk County, eastern Hillsborough County, and along the Pinellas and Pasco County coastline. For some areas in Tampa Bay, the hurricane force wind gusts were the highest felt from a tropical cyclone since Hurricane Gladys crossed Citrus County in 1968. For selected wind observations, click here.

Rainfall and Flooding

Jeanne's rains (Top right, above) were somewhat less across west central and southwest Florida than with Frances, primarily due to the storm's pace. The area of steady, heavy rain was concentrated near the center of circulation, and feeder bands on the back (south) side lasted less than 10 hours, compared with up to 24 hours behind slow-moving Frances over portions of the Nature Coast.

Unfortunately, another 6 inches of rain fell into the Withlacoochee River basin, swelling the already moderate-flooding river and threatening all time floods of record. Similar rainfall in the upper reaches of the Peace River basin (Polk County) reinforced already high values, with stage values in Bartow approaching the record set days after Frances passed. Other rivers in west central Florida flooded, but not to the extent as they had with Frances. The table below shows stage data for selected rivers in west central Florida.

As of this writing, significant areal freshwater flooding was confined to Polk County, which received the highest storm total precipitation (6 to 10 inches, in general). Urban flooding was common in the Tampa Bay and Sarasota/Bradenton metropolitan areas.

Coastal Flooding

Coastal flooding was more of a nuisance with Jeanne than with Frances, whose duration of southwest winds produced more widespread problems from the Tampa Bay area northward, and Ivan, which induced significant beach erosion on the Suncoast's barrier islands. Minor flooding was noted at Cedar Key (Levy County), where tides switched from more than 4 feet below normal to more than 3 feet above normal hours after the winds shifted, and along the northern Pasco County coast near Hudson, where high tides

were up to 3 feet above normal.

A bit surprising was minor coastal flooding in Charlotte and Lee Counties, a result of persistent northwest winds of at least 25 knots overnight on the 25th building up water in Pine Island Sound and the lower portion of Charlotte Harbor, only to be pushed onshore when the winds veered to the west at tropical storm force on the 26th. Approaching high tide produced 2 to 4 feet of surge on Sanibel Island (bayside), St. James City, and the west end of Fort Myers Beach. Similar flooding was reported along the Charlotte County coast.

Table 1. Preliminary River Stage Data, after Jeanne. "R" after the stage value means river was still cresting as of 8 PM September 29th. Number 1 rankings are floods of record.

River and Station	Flood Stage	Crest		Rank (Yrs. of Record)
		Stage (Ft)	Date	
Withlacoochee R. at Dunnellon	29	30.41	9/27 11AM	4 (41)
Withlacoochee R. at Holder	8	10.83R	Cresting	5 (74)
Withlacoochee R. at Croom	9	11.55R	Cresting	6 (65)
Withlacoochee R. at Trilby	12	16.55R	Cresting	6 (75)
Cypress Crk. at Worthington Gardens	8	11.05R	Cresting	8 (40)
Hillsborough R. at Zephyrhills	10	13.16	9/28 1AM	10 (64)
Hillsborough R. at Morris Brg.	32	32.39R	Cresting	7 (32)
Alafia R. at Lithia	13	19.19	9/28 230AM	14 (71)
Peace R. at Bartow	8	10.87R	Cresting	3 (73)
Little Manatee R. at Wimauma	11	14.6	9/28 630AM	30+ (65)
Peace R. at Zolfo Springs	16	21.19	9/29 130AM	9 (70)
Peace R. at Arcadia	11	15.74	Cresting	16 (73)